

# SWBAT

## Practice on AP style Newton's Laws questions

Sep 4-7:31 AM


SECA CP Physics  
Monday 11 April 2016

# Welcome!!!

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Centering  
(puzzle)

PEDs with Passing



- Show me SchoolView if you want phone in class...

## Hmwk for Wed 4/13: Notes on Eureka 8-10

Opening Activity: Quick Write

Reflect on you during Q3 Physics -  
what went well? what could be  
better going forward?

RIGHT UNDER  
THE NOSE

BEE LINE

NO NO  
RIGHT

BBBBBB

What kind of testing environment requests  
do you suppose you will face in college?

Sep 7-7:04 AM

So we took a test on Newton's Laws for class credit... what is it like on AP test?

$$F_{\text{NET}} = m \cdot a_{\text{NET}} \quad F_{\text{grav}} = m \cdot g \quad F_{\text{fric}} = \mu \cdot F_{\text{norm}}$$

- Do 3, 5, 9: Think about FBD and our test

$$g = 9.81 \text{ m/s}^2 \text{ DOWN}$$

- Then #6 takes work, but I don't need to see it...

- Then back up to #2: Graded on work shown like our test was.

Apr 11-8:34 AM

BACK OF NOTEBOOK:

"PHYSICS CODE WORDS"

MAGNITUDE: SIZE, HOW BIG

VECTORS HAVE MAG. & DIRECTION

\* HORIZONTAL: SIDEWAYS, LEFT/RIGHT, X-DIRECTION

VERTICAL: UP/DOWN, Y-DIRECTION  
"VERY TALL"

AT REST: VELOCITY = 0

CONSTANT SPEED/VELOCITY: BALANCED FORCES,  
NET FORCE = 0

$\Sigma$ : "SIGMA", SUM, TOTAL ACCELERATION = 0  
(+ & -) "NET"

NORMAL: SUPPORT FORCE, ON A SURFACE  
→ PERPENDICULAR

TENSION: FORCE FROM A ROPE

Mar 30-9:46 AM

## What we should have solid:

Memorize our ~~8~~ vocab cards, units, vector or not, definition, formula

Be able to answer distance vs displacement questions

Be able to make measurements of real-life motion. Know what is likely to make timing things difficult and how to get more reliable timing results

Be able to convert between miles and meters, between hours, minutes, and seconds

Be able to calculate speed = dist/time and velocity = disp/time

Know what all of the symbols in the UAM equations stand for and mean

Be able to turn a UAM word problem into a list of knowns and unknowns

Be able to pick the equation with those 4 things in it

Be able to put the knowns into that equation

(Be able to solve for the unknown)

→ PROJECTILES:  $v_x$  IS CONSTANT;  $a_y = -9.8 \text{ m/s}^2$  PG 42 V<sub>y</sub> CHANGES

PG 43 TIME,  $\Delta t$ , CONNECTS  $x$  &  $y$

PG 53 1<sup>ST</sup> LAW,  $\Delta t$ , CONNECTS  $x$  &  $y$

PG 49 VECTORS INTO  $x$  &  $y$ , ADD VECTORS

SOH-CAH-TOA

PG 59 DIFFERENCE BETWEEN MASS & WEIGHT

PG 61 NET FORCE

PG 63 FREE BODY DIAGRAMS

$$F = m \cdot a$$

PG 70  $F_f = \mu \cdot N$

QW every day to review - gather responses to front board.

Dec 4-9:15 AM

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Sep 5-9:09 AM